CLAIMS

1. A method of reducing an n-order component of a radial run out (RRO) of a wheel rim having a pair of bead seats for tire beads, comprising

measuring a radial run out Y1 of one of the bead seats around the wheel rim,

measuring a radial run out Y2 of the other bead seat around the wheel rim,

finding an average Y of the radial run out Y1 and radial run out Y2 around the wheel rim,

obtaining the peak-to-peak amplitude of the n-order component as RRO value X,

finding minimum position(s) at which the n-order component becomes minimum and determining deep position(s) P on the wheel rim corresponding to the minimum position(s),

determining the length L of a corrective tape as a value within a range of from 0.8 to 1.02 times a length L0,

applying a corrective tape to one of or alternatively each of the bead seats at each said deep position P, wherein

the corrective tape is made of a synthetic resin and has a thickness t of from 0.1 to 0.5 mm, and

said length L0 is defined by the following precision expression (1) or alternatively simplified expression (2)

(1) $$L0 = \frac{R}{\pi \times n} \times \arcsin\left(\frac{X}{t \times a \times 1.3}\right)$$

(2) $$L0 = \frac{100 \times R \times X}{360 \times t \times a \times n} \quad \text{where} \quad 0 < \frac{L0}{R} < 0.28$$

wherein

L0 is a value in mm,

X is a value in mm,

n is a positive integer of the order number of the n-order component,

t is a value in mm,

a is a multiplier which is 0.5 when the corrective tape is applied to one of the bead seats or 1.0 when the corrective tape is applied to both of the bead seats,

R is the circumference in mm of the bead seat,

pi is the circle ratio (=3.14159---), and

the unit of the argument of arcsine is radian.

2. A method according to claim 1, wherein the order number of the n-order component is 1.

3. A method of improving radial run out (RRO) of a wheel rim having a pair of bead seats for tire beads, comprising

measuring a radial run out Y1 of one of the bead seats around the wheel rim,

measuring a radial run out Y2 of the other bead seat around the wheel rim,

finding an average Y of the radial run out Y1 and radial run out Y2 around the wheel rim,

analyzing the average Y around the wheel rim to find out an n-order component which is largest in the peak-to-peak amplitude,

obtaining the peak-to-peak amplitude of the n-order component as RRO value X,

finding minimum position(s) at which the n-order component becomes minimum and determining deep position(s) P on the wheel

rim corresponding to the minimum position(s),

determining the length L of a corrective tape as a value within a range of from 0.8 to 1.02 times a length L0,

applying a corrective tape to one of or alternatively each of the bead seats at each said deep position P, wherein

the corrective tape is made of a synthetic resin and has a thickness t of from 0.1 to 0.5 mm, and

said length L0 is defined by the following precision expression (1) or alternatively simplified expression (2)

(1) $$L0 = \frac{R}{\pi \times n} \times \arcsin\left(\frac{X}{t \times a \times 1.3}\right)$$

(2) $$L0 = \frac{100 \times R \times X}{360 \times t \times a \times n} \quad \text{where} \quad 0 < \frac{L0}{R} < 0.28$$

wherein

L0 is a value in mm,

X is a value in mm,

n is a positive integer of the order number of the n-order component,

t is a value in mm,

a is a multiplier which is 0.5 when the corrective tape is applied to one of the bead seats or 1.0 when the corrective tape is applied to both of the bead seats,

R is the circumference in mm of the bead seat,

pi is the circle ratio (=3.14159---), and

the unit of the argument of arcsine is radian.